To: Pfeiffer, Tricia[Pfeiffer.Tricia@epa.gov];

stuart.ellsworth@state.co.us[stuart.ellsworth@state.co.us]

Cc: 'David Andrews - DNR'[david.andrews@state.co.us]

From: L Bracken

Sent: Wed 12/14/2016 3:53:00 AM

Subject: RE: FW: Request for EPA Evaluation

Thank you both for this important information.

Stuart, in recent years, EnCana petitioned and won the opportunity to curtail sampling from monitor wells both in terms of constituents tested for and the number of monitor wells (geographic scope of area) to be tested.

I felt, then, that such an allowance was inappropriate given the apparent presence of the seep from 2004 in the area, especially in light of the concurrent series of Twin Creek wells drilled (bottom hole location) into that active zone.

Because the Schwartz 2-15B was the well recognized by the COGCC as the well responsible for the occurrence of the 2004 seep, I truly hope you can assure me as well as other area residents dependent on West Divide Creek surface and aquifer hydrology that at least a one-year, twice-monthly round of renewed sampling at all previously sampled monitor well locations will be sampled, for the same constituents as initially sampled, in order to better determine any unintended negative impacts from this abandonment.

I think such consideration is only prudent given what is still unknown and only suspected about the circumstances surrounding the existence and production of that well.

I worry that plugging the 2-15B well could lead to a re-pressurization of the formation – whether or not a target, given the history of zone isolation problems and the potential for the injection of 260 +/- tons of CO2 to continue to degrade both the cement and the formation itself.

Thanks, Lisa Bracken

From: Pfeiffer, Tricia [mailto:Pfeiffer.Tricia@epa.gov]

Sent: Tuesday, December 13, 2016 1:57 PM

To: stuart.ellsworth@state.co.us; Ex. 6 - Personal Privacy

Cc: David Andrews - DNR

Subject: RE: FW: Request for EPA Evaluation

Thanks Stuart for the information. When EnCana performed the bradenhead test, did they follow the procedure per NTO:

http://cogcc.state.co.us/documents/reg/Policies/NTO_07082010.pdf that requires a (7) day shut in prior to the test? The latest bradenhead data on COGCC's website:

http://cogcc.state.co.us/documents/library/AreaReports/PiceanceBasin/WaterQuality/BMA.html is for 2013. I reviewed the data and it states that on 10/13/13: fluid type=gas, 7 day build up= 55 psi, blow down= 4 (no units cited); surface csg= 706 ft bgs. I reviewed COGCC website (http://cogcc.state.co.us/data.html#/cogis) and looks like the top of cement is listed at 2300 ft bgs—is that correct?

--t

Tricia Pfeiffer, Environmental Engineer

USEPA, R8 Aguifer and Aquatic Resource Protection Unit

Office: (303) 312-6271

From: Stuart Ellsworth - DNR [mailto:stuart.ellsworth@state.co.us]

Sent: Friday, December 09, 2016 4:51 PM

To: Pfeiffer, Tricia < Pfeiffer. Tricia@epa.gov>; Ex. 6 - Personal Privacy

Cc: David Andrews - DNR <david.andrews@state.co.us>

Subject: RE: FW: Request for EPA Evaluation

Ms. Pfeiffer and Ms. Bracken:

Thank you for your inquiry regarding the status of the SCHWARTZ 2-15B, API# 045-09306 well abandonment.

Encana Oil & Gas (USA) Inc. submitted COGCC Form 6, Notice of Intent to Abandon the SCHWARTZ 2-15B, API# 045-09306 (Document # 401132849).

The reason on the Intent to Abandon was due to the well having "Production Sub-economic."

The request was received at the Commission on October 19th, 2016. Commission staff reviewed and approved the Form 6, Notice of Intent to Abandon on November 2, 2016. Staff placed the following 3 conditions of approval on the Intent to Abandon:

- 1) Prior to initiation of plugging operations, a bradenhead test shall be performed. If any pressure remains at the conclusion of the test or any liquids were present call COGCC Engineer for sampling requirements and changes to the plugging procedure. Form 17 shall be submitted within 10 days of the test.
- 2) Provide 48 hour notice of plugging MIRU (move in rig up) via electronic Form 42.
- 3) Properly abandon flowlines per Rule 1103. File electronic Form 42 when flowline abandonment is complete.
- Encana did perform the Bradenhead Test on November 7th and submitted the Form 17 Bradenhead Test Report, document #401144807. The test was witness by commission staff as noted in Field Inspection Form, document #666802713. No fluids were observed to be flowing from the bradenhead valve during the test and no pressure was observed.
- Encana did submit the Form 42 Field Operation Notice for Abandonment on November 9th for a November 14th schedule of work.
- Commission staff were on sight to observe the abandonment on November 14th and 15th as noted in Field Inspection Forms #666802745 and #674300779.

Please note that the commission does have additional regulation requirements and expectations of Encana related to this well abandonment.

1. After a well is abandon the commission requires an operator to submit a Form 6

Subsequent Report of Abandonment to confirm proper abandonment, which is to include support data for how the well was abandoned.

2. There will also be follow up inspections by the Environmental and Reclamation Groups as Encana progress with the abandonment.

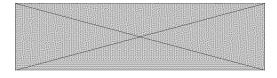
I hope this provides you with an understanding of the recent activity at the SCHWARTZ 2-15B.

If there are additional questions, feel free to call.

Thank you and Regards,

Stuart M. Ellsworth, P.E.

Engineering Manager



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From: Andrews - DNR, David [mailto:<u>david.andrews@state.co.us</u>]

Sent: Friday, December 09, 2016 2:15 PM

To: Ellsworth, Stuart

Subject: Fwd: FW: Request for EPA Evaluation

------ Forwarded message -----From: Pfeiffer, Tricia < Pfeiffer. Tricia@epa.gov>
Date: Fri, Dec 9, 2016 at 8:51 AM
Subject: FW: Request for EPA Evaluation
To: David Andrews - DNR < david.andrews@state.co.us>
Cc: Ex. 6 - Personal Privacy

David,

Can you answer Ms. Bracken's questions below about the recent activity on the Schwartz pad? I don't believe it can be looked up in the COGCC database given it's currently in process.

Thanks, Tricia

Tricia Pfeiffer, Environmental Engineer USEPA, R8 Aquifer and Aquatic Resource Protection Unit

Office: (303) 312-6271

----Original Message----

From: L Bracken Ex. 6 - Personal Privacy

Sent: Thursday, December 08, 2016 4:45 PM To: Pfeiffer, Tricia < Pfeiffer. Tricia@epa.gov Subject: RE: Request for EPA Evaluation

Tricia and team;

I've noted recent pad activity (mid Nov to early Dec, 2016) on the first Schwartz pad excavated here in the Mamm Field, that seems to have involved the use of pulleys on drill stems.

I am wondering if this activity is in any way related to the on-going review/evaluation (similar to that of Miller) which I requested in December of 2013 and which was subsequently initiated by the EPA and collaboratively analyzed by the COGCC.

Please recall, the request for the evaluation was an outgrowth of my concern for observable impacts relative to the 2004 and 2008 seeps which occurred during drilling/fracing operations associated with a number of specific wells in this area.

I have reviewed the COGCC's You Tube video and presentation: https://www.youtube.com/watch?v=XnYfzW0Rhes associated with my request for evaluation.

While it seems that my request for evaluation has been useful in encouraging a multi agency

review -- the video presentation noted above appears to fail to account for potential operational implications from the wells specific to my concerns noted above (that is relevant: Twin Creeks, Price, Schwartz, and, Brown wells).

While I truly appreciate the extended and collaborative nature of a multi-agency review, I am requesting, once again, a complete copy of the actual evaluation conducted by the EPA and specific to the EPA's considerations arising from my request. Given the welcome and broad potential for any such evaluation to invite and support interpretive differences, please include any lab/bench/field notes that may lend a greater understanding in my interpretation of the EPA's perspective on the EPA's evaluation.

Thank you, Lisa Bracken

----Original Message----

From: Pfeiffer, Tricia [mailto: Pfeiffer. Tricia@epa.gov]

Sent: Wednesday, December 11, 2013 3:28 PM

To: L Bracken

Cc: Andrews - DNR, David; Oberley, Gregory; Alex Fischer - DNR

Subject: RE: Request for EPA Evaluation

Importance: High

Lisa,

I have attached the spreadsheet provided to COGCC that contains the analysis conducted by EPA that I believe the slides are referencing. Please call me if you have any questions and I will explain what was done.

Tricia Pfeiffer Environmental Engineer US EPA Region 8 Watershed & Aquifer Protection Unit

Phone: (303) 312-6271 Fax: (303) 312-7150

http://www.epa.gov/region8/ecosystems/

US EPA Region 8 1595 Wynkoop Street Mail Code 8EP-EPR Denver, Colorado 80202

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----Original Message---From: L Bracken Ex. 6 - Personal Privacy
Sent: Wednesday, December 11, 2013 2:41 PM

To: Pfeiffer, Tricia

Subject: Request for EPA Evaluation

Tricia,

Can you please send me any references or review work the EPA has conducted relative to the COGCC's work on West Divide Creek?

I came across this reference (below) in the COGCC presentation library (could not extract pages to include for reference - but please see slides 34 and 35 specifically), and it would be helpful to have the referenced review in correlating incoming data, especially relative to Garfield County's Phase III conclusions.

Thanks for any assistance you may be able to offer.

Lisa Bracken

http://cogcc.state.co.us/Library/PiceanceBasin/EastMammCreek/NW_Cmt_BH_Practices_COGCC20110919.pdf